

Summary

Production Name	COX1 (8G12) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

Immunogen

Gene Name	PTGS1
	COX-1; COX1; COX3; Cyclooxygenase-1; PCOX1; PGG/HS; PGH synthase 1; PGH1;
Alternative Names	PGHS1; PHS1; Prostaglandin G/H synthase 1; Prostaglandin H2 synthase 1; PTGHS;
	PTGS1;
Gene ID	5742.0
SwissProt ID	P23219.A synthetic peptide of human COX1/Cyclooxygenase 1

Application

Dilution Ratio	WB: 1:1000-1:5000
Molecular Weight	69kDa



Background

Cyclooxygenase-1 May play an important role in regulating or promoting cell proliferation in some normal and neoplastically transformed cells. Belongs to the prostaglandin G/H synthase family. Homodimer. 2 isoforms of the human protein are produced by alternative splicing. Dual cyclooxygenase and peroxidase in the biosynthesis pathway of prostanoids, a class of C20 oxylipins mainly derived from arachidonate, with a particular role in the inflammatory response. The cyclooxygenase activity oxygenates arachidonate (AA, C20:4(n-6)) to the hydroperoxy endoperoxide prostaglandin G2 (PGG2), and the peroxidase activity reduces PGG2 to the hydroxy endoperoxide PGH2, the precursor of all 2-series prostaglandins and thromboxanes. This complex transformation is initiated by abstraction of hydrogen at carbon 13 (with S-stereochemistry), followed by insertion of molecular O2 to form the endoperoxide bridge between carbon 9 and 11 that defines prostaglandins. The insertion of a second molecule of O2 (bis-oxygenase activity) yields a hydroperoxy group in PGG2 that is then reduced to PGH2 by two electrons (PubMed:>7947975/a>). Involved in the constitutive production of prostaglandins, such as prostaglandin E2 (PGE2), which plays an important role in cytoprotection. In platelets, it is involved in the generation of thromboxane A2 (TXA2), which promotes platelet activation and aggregation, vasoconstriction and proliferation of vascular smooth muscle cells (Probable).

Research Area

Image Data



Western blot detection of COX1/Cyclooxygenase 1 in C6,3T3 cell lysates using COX1/Cyclooxygenase 1 antibody(1:1000 diluted).

Note



For research use only.